UPDATED INFORMATIVE DIGEST

AMENDMENTS TO THE REGULATION ON FUEL SULFUR AND OTHER OPERATIONAL REQUIREMENTS FOR OCEAN-GOING VESSELS WITHIN CALIFORNIA WATERS AND 24 NAUTICAL MILES OF THE CALIFORNIA BASELINE

<u>Sections Affected</u>: Amendments to title 13, California Code of Regulations (CCR), section 2299.2, and title 17, CCR, section 93118.2, the Ocean-Going Vessel Clean Fuel Regulation (OGV Clean Fuel Regulation or regulation).

Background: The Air Resources Board (ARB or Board) adopted the OGV Clean Fuel Regulation in 2008 (title 13, California Code of Regulation (CCR) section 2299.2 and title 17, CCR section 93118.2). This regulation is one of many steps being taken to reduce diesel particulate matter (PM) emissions from goods movement activities. It also is a key measure in meeting the goals of California's State Implementation Plan (SIP) and Goods Movement Emission Reduction Plan.

The OGV Clean Fuel Regulation requires operators of ocean-going vessels (OGVs) to use less polluting marine distillate fuels instead of heavy fuel oil (HFO) in their diesel engines and auxiliary boilers while operating within approximately 24 nautical miles (nm) of the California coastline (Regulated California Waters or regulatory boundary). The fuel requirements are implemented in two phases. The Phase 1 fuel requirements, which began implementation on July 1, 2009, require the use of either marine gas oil (MGO) or marine diesel oil (MDO). Under the Phase 1 requirements, the MGO has a maximum sulfur limit of 1.5 percent (%), and the MDO has a maximum sulfur limit of 0.5%. The Phase 2 requirements, which are scheduled to begin on January 1, 2012, specify the use of either MGO or MDO at 0.1% sulfur.

ARB staff developed proposed amendments to the regulation to address a shift in vessel traffic patterns in Southern California that occurred when the Phase 1 fuel requirements began implementation. This shift in vessel traffic patterns raised concerns about potential impacts on the U.S. Navy's Point Mugu Sea Range operations and resulted in less emission reductions in Southern California than originally anticipated when the regulation was adopted. In addition, ARB staff proposed amendments to reflect new information and provide additional time for industry to successfully transition to the 0.1% sulfur marine distillate fuels.

<u>Description of the Regulatory Amendments:</u> At a June 23, 2011 public hearing, the ARB considered the proposed amendments to the OGV Clean Fuel Regulation. Pursuant to the Board's direction, the Executive Officer subsequently adopted the

¹ Two essentially identical regulations were adopted to reflect the authorities granted to the ARB in the California Health and Safety Code to regulate sources of toxic air contaminants and to regulate marine vessel emissions. In this document the regulations are collectively referred to as "the OGV Clean Fuel Regulation" or "the regulation."

amendments to the existing OGV Clean Fuel Regulation. A summary of the amendments is presented below. A more detailed description can be found in the Initial Statement of Reasons for Rulemaking at http://www.arb.ca.gov/regact/2011/ogv11/ogv11.htm.

Regulated California Waters: The regulatory boundary in Southern California was amended by extending it further off shore and aligning it more closely in Southern California with the "Contiguous Zone," which is 24 nm from the California Baseline (shoreline), which includes offshore islands. In addition, the amendments exempt vessels from the clean fuel requirements when transiting a small region ("window") within the 24 nm regulatory boundary off Point Conception. This exemption window is being provided to encourage vessels to travel in the established shipping lanes in the Santa Barbara Channel when headed to or from the ports of Los Angeles and Long Beach. This amended regulatory boundary will lessen the economic incentive for OGVs to transit through the Point Mugu Sea Range instead of the Santa Barbara Channel and will help reestablish the emission reductions from the regulation.

Phase 2 Implementation Date: The original regulation requires the use of Phase 2 0.1% sulfur distillate fuel beginning January 1, 2012. The amendments extend the deadline to use the Phase 2 fuel by two years to January 1, 2014. This two-year delay will help facilitate a more successful transition to the 0.1% sulfur distillate fuels.

Noncompliance Fee Provision: The "noncompliance fee provision," in certain specified situations, allows the payment of fees in lieu of direct compliance with the rule through the use of cleaner fuels. This provision has been used five times since the OGV Clean Fuel Regulation began implementation. Amendments to this provision include adjusting the fee schedule specified in the regulation, reducing the fees by half for vessel operators that purchase and use complying fuels after arriving to a port on noncomplying fuel, and specifying that offshore anchorages made in conjunction with a port visit not be counted as a "port visit.

Other Amendments: The regulation was amended to include a March 2007 update to the National Oceanic and Atmospheric Administration (NOAA) nautical chart 18740 covering California's coastline from San Diego to Santa Rosa Island. These charts are used to help define California Regulated Waters. The definitions of the fuels required under the OGV Clean Fuel Regulation were amended to reflect recent changes in how these fuels are specified under international standards. In addition, to align California's Phase 1 fuel requirements with upcoming federal requirements, a 1.0% fuel sulfur limit for the Phase 1 marine gas oil was included in the regulation and that limit will begin August 1, 2012 to coincide with a North American Emission Control Area (ECA) implementation date.

Comparable Federal Regulations: There are no comparable federal regulations at this time. However, federal requirements established through the International Maritime Organization (IMO) may be comparable in 2015. Specifically, the United States and Canada jointly applied for an ECA designation covering sulfur oxides and oxides of nitrogen in July 2009. On March 26, 2010, the IMO officially designated waters of the United States and Canadian coastlines as an ECA, referred to as the North American ECA. The region applies 200 nm offshore in most regions, including California. The North American ECA is expected to be implemented here starting on August 1, 2012, when a 1% sulfur limit would apply. The emission reductions achieved by the 1% fuel sulfur requirement would not be comparable to the California regulation because heavy fuel oil could be used, while the California rule requires the use of cleaner burning distillate grades of fuel. However, in 2015, the North American ECA is expected to reduce the fuel sulfur content to 0.1%. At that time, the North American ECA would be expected to comparable. The California regulation includes a provision that requires the Executive Officer to sunset enforcement of the regulation when it is determined that the federal requirements achieve equivalent emission reductions, and are being enforced.

Benefits of the Amendments: The proposed amendments will help to restore the public health and air quality benefits expected from the regulation, while eliminating the economic incentive for vessel operators to use alternative routes that pass through the U.S. Navy's Point Mugu Sea Range. The amendments will also more closely align the OGV Clean Fuel Regulation's fuel requirements with the North American ECA, and help to facilitate a successful transition to the Phase 2 fuel sulfur standards. The regulation is cost-effective compared to other diesel PM regulations the Board has adopted previously, as well as to the original OGV Clean Fuel Regulation.